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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,160	07/07/2003	Friedrich Bossler	4508	8224

21553 7590 05/04/2005

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EXAMINER

SHARMA, RASHMI K

ART UNIT	PAPER NUMBER
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3651

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,160

Applicant(s)

BOSSLER, FRIEDRICH

Examiner

Rashmi K. Sharma

Art Unit

3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/03 & 11/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 10/10/2003 and 11/12/2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the a drive connected to at least some of the orienting elements, a vertical motion drive and where the orienting passages between the first and second disc rolls are adjusted smaller than the width of the orienting passages between the third and fourth disc rolls must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 19 and 20 are objected to because of the following informalities: it appears that claim 19 line 4 should recite "said discs" and claim 20 line 3 should recite "rolls are adjusted". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 5 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the same" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites "a plurality of vertically extending orienting elements". The term "vertically extending" is a relative term. Relative to what structure are the orienting elements vertically extending? Further clarification is required.

Claim 5 recites "discs form vertical orienting passages" in line 15. The term "vertical" is a relative term. With reference to exactly what structure is the term "vertical" being referred to? Further clarification is required.

Claim 11 recites "so as to be movable in said axial direction". This term deems the claim vague and indefinite. It is unclear as to exactly what structure this term is referring to. Is the term referring to the disc movement relative to its respective shaft or the movement of the shaft and disc assembly together? Further clarification is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-7, 9-12, 14, 15, 17, 18, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Ufermann et. al. (U.S. Patent number 4,068,991).

Ufermann et al. discloses a method and apparatus for longitudinally orienting elongated strands (1a) of a bulk material, said apparatus comprising a plurality of vertically extending orienting elements or discs (3) that form orienting passages (see Figure 3) therebetween adapted to have said elongated strands (1a) flow therethrough

in a longitudinally oriented manner, a rotatable shaft (8) on which the discs (3) are mounted spaced apart and parallel to one another, vertically and perpendicularly to the axial direction of the rotatable shaft (8) to form a respective disc roll where the shaft (8) is oriented with an axis being parallel to an adjustment direction, a rotating or vertical motion adjustment drive (30, 31) connected to at least some or a first group of said orienting elements (3) to provide a power-driven adjustment of the first group in an axial direction (read column 5 lines 29-38), a conveyor arrangement that is located below said orienting passages to receive said elongated strands thereon and that is adapted to convey said elongated strands in a conveying direction, wherein at least a first group of said orienting elements are adjustable relative to a second group of said orienting elements so as to adjust respective widths of said orienting passages in the adjustment direction perpendicular to said conveying direction (see Figure 3 and read column 35-47 and column 4 lines 59-61), wherein at least one of the orienting elements comprise a guide wall (either the top or the bottom disc in any of the disc rolls shown in Figure 3), a plurality of disc rolls (see Figure 3), a conveyor arrangement (1 and 2) located below the disc rolls (see Figure 1) to receive the elongated strands thereon and that is adapted to convey the elongated strands in a conveying direction perpendicular to the axial direction, wherein the discs (3) form vertical orienting passages (see Figure 3) adapted to have the elongated strands flow therethrough in a longitudinally oriented manner onto the conveyor arrangement (1 and 2), wherein at least a first group of the discs (3) are adjustable in the axial direction relative to a second group of the discs (3) so as to adjust respective widths of the orienting passages (read column 35-47 and column 4

lines 59-61). Ufermann also discloses the orienting passages being formed between two discs that are adjacent to each other in the axial direction and are respectively components of two disc rolls that are adjacent to each other in the conveying direction (see Figure 3) and wherein the width of the orienting passages is given by an adjustable spacing between the two discs in the axial direction, wherein two of the disc rolls are arranged so that the discs of one of the disc rolls overlappingly intermesh in axial interspacings between the discs of the other of the two disc rolls, wherein the plurality of disc rolls includes at least three disc rolls (see Figure 3) and wherein the first group of the discs that are axially adjustable are discs of at least one of the three disc rolls, wherein the first group of discs (3) are fixedly mounted on the shaft (8) of an adjustable one of the disc rolls, wherein an axial range of adjustability of the first group of discs extends maximally to an axial interspacing distance between successive ones of the discs on a respective one of the shafts (8), a housing (12a) in which the disc rolls are arranged to form a strand spreader head and wherein the conveyor arrangement (1a) comprises a forming belt arranged below the housing (12a), wherein all of the discs (3) have the same diameter (see Figure 1), wherein the first group of discs can be adjusted to simultaneously form two different sizes of the orienting passages having different widths between the discs of the first group and the discs of the second group (see Figure 3, the left three shaft and disc arrangements), thereby having an orienting passage width smaller between the first and second disc rolls than the orienting passage width between third and fourth disc rolls.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 8 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ufermann et. al. (U.S. Patent number 4,068,991) in view of Crittenden et al. (U.S. Patent number 5,325,954).

Ufermann et al. as disclosed above fails to show uniformly spaced disc rolls along all rotatable shafts and an orienting passage width of at most one half of an average length of the elongated strands.

Crittenden et al. does disclose uniformly spaced disc rolls along all rotatable shafts (see Figure 1) and an orienting passage width of one half of an average length of the elongated strands (read column 6 lines 52-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ufermann's disc rolls to be spaced uniformly as taught by Crittenden in order to provide spreading of only a particularly sized strand, having specific limited dimensions. It also would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ufermann's orienting passages widths to be one half of an average length of the elongated strands as taught by Crittenden in order to provide for the spreading of strands that are sized only up to

one half of the average length of the strands or smaller. Limiting the width in this manner allows for only specifically sized strands to be conveyed.

Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ufermann et. al. (U.S. Patent number 4,068,991).

Ufermann et al. as disclosed above, fails to show the apparatus being capable of manually adjusting the first group of discs in the axial direction and where alternating disc rolls are adjustable and adjusting the disc rolls to produce orienting passages that successively vary in width between adjacent disc rolls.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ufermann's motor arrangement to allow for manual adjustment of the first group in order to provide for the utilization of an operator to change the widths of the orienting passages depending on what sized strands are being conveyed.

It also would have been obvious to modify Ufermann's adjustable shafts to be either all adjustable or alternately adjustable or any other combination thereof, in order to provide for orienting passages to vary in widths successively, between adjacent disc rolls. This allows for the articles being conveyed in a manner that orients the articles.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rashmi K. Sharma whose telephone number is 571-272-6918. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 571-272-6951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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